Universidade de Évora

Master's in Computer Engineering

Desenho de Jogos

Challenge 2 - It's Mine

The Cave

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Conquer, Expand, Dominate and do not step wrong! Prove you're the best conqueror avoiding fire and getting the most territory possible! Are you ready to slide and collide through an unexpected cave?

2 Introduction

Welcome to this unexpected singleplayer and local multiplayer territory acquisition game, where the most conqueror of all must be too the smartest one! In this unknown path 1 player or 2-4 players must conqueror the most territory possible avoiding fire, walls, blocked paths, and soo on. Here, every wrong step can make you lose or even win, you should play it to find out. Are you really ready to become the conqueror of the conquerors? Let the challenge begin!

3 Demographic Breakdown

- **Target Audience**: Any age can play, any people that like to be a conqueror.

- **Genre**: Territory Acquisition game, Strategy maybe.

- **Intended Platform(s)**: Firstly designed to PC.

4 Feature List

- **Single Player Gameplay**

- **Local Multiplayer Gameplay**

- **Cave designed using tilemap with collision's and navigation**

- **Gun Tower's and Bullets**

- **Timer**

- **Score Board and conquering personalized tiles**

- **Tile conquering sound, fire step sound**

- **Health Bar**

- **Game Transition Buttons**

5 Feature List Breakout

- **Single Player Gameplay**: Game mode where a single player play alone in a cave trying to get better and better territory acquisition under a timer.

- **Local Multiplayer Gameplay**: Game mode where 2-4 players play against each other to see who can conqueror most territory under a timer.

- **Cave designed using tilemap with collision's and navigation**: The cave was drawn using different types of tiles. Tiles to create the cave itself, the path, where the players can navigate, the tiles that represent the cave walls having collision settings and tiles representing fire where a player can lose health if steps into.

- **Gun Tower's and Bullets**: Have been defined some gun tower's that shoot bullets against all the players in order to disturb their main purpose, conquer territory. (Unfortunately the bullets do not affect the players health)

- **Timer**: Was defined a game timer to allow the game to have an end and give more challenge to the players that become under pressure. (This timer can be changed inside in the script to allow more or less game time)

- **Score Board and conquering personalized tiles**: Was defined a score board for each player that is increased everytime a player steps into a cave tile. To make this conquest purpose visible, each player have a personalized tile that indicates which territory belongs to who. (If a conquered tile is stepped by another player, that tile changes of type and the player that lost the tile, or the territory, loses a point. In the other way, the new conqueror of the tile, gains a point)

- **Tile conquering sound, fire step sound**: To make the conquerer of territory more fun and captivating, a sound effect was added to simulate the obtaining of a piece of land. In addition to this, was added to a sound effect when a player steps into a fire tile, indicating burning, and in consequence, lose of health.

- **Health Bar**: Each player have a health bar to show how much life every single one of them have. If a player dies, or loses all of his health, the game ends and no one wins. (This is one of the biggest challenges that i faced because i wanted to remove a player when he dies and i couldn't achieve that. In single player this feature is working great because allows the player to be more carefull and give a extra challenge. But in multiplayer way, it becomes boring that the games ends in that molds.)

- **Game Transition Buttons**: All over the game have been added some buttons to allow more flow through the scenes. Restart a game is possible, comeback to main menu, quit an occurring game, exit the game, soo on.

6 Implementation Reference

- **Game State**: All the players start at manual random positions of the cave. The game progress is made through the cave where a player can conquer a point by stepping into unknown tiles, lose points if another player steps into their territory, or their tiles, lose health by stepping into fire tiles that are reducing the players health in 10 points. If the game timer reaches 0, the game ends and a winner or the results are displayed. If a player dies because of the reduced health in 100 points, the game ends for every single one and no winner or results are shown. Each player have a movement defined by a specific keyboard layout. The game can be played by yourself, singleplayer, or fully local multiplayer, allowing at minimum 2 players and at maximum 4 players that can play at the same environment.

- **Player Actions**: Each player can move along the cave, using the keyboard(each player have a different keyboard movement), conquerer territory (tiles), lose health stepping into fire

- **Game Setup**: Game starts with a Main Menu Scene with 3 possible options: Single Player, Local Multiplayer and Exit. The game has a tilemap defined for a singleplayer mode and another tilemap defined for a local multiplayer mode. Each mode has a winning scene indicating who wins and how much points did he make. Players can move right, left, up and down through the cave and each player have a specific keyboard layout. George is moved by the default arrows, Werewolf is moved by the "WASD" pattern, Baldric is moved using a personalized control using the keys V (Up), Space (Down), Alt (Left) and CTRL (Right) and Golem which is moved by another personalized control where the keys U (Up), J (Down), H (Left) and K (Right) take place. The game has some sound effects, like conquering territory or stepping into fire. Was created to a GameOver scene that is shown everytime a player dies.

- **Victory Conditions**: A player wins if he conquers more territory than all the other players, inside the game time defined and without dying. (Dying causes the game to over for all the players)

- **Progression Of Play**: Each player start at a manual random position inside the cave and their clear objective is conquer as much territory as they can, inside the time defined and without dying. There are going to exist some gun tower's shooting bullets against the players trying

to disturb them, without removing them health, and each player are going to have random speed soo the game can be more challenging. A player can become stuck between a wall and fire, between walls or just become stuck in the middle of the fire. In this case the player must check how can he progress getting territory without losing health, or losing as less health as possible. The most quick conqueror, under the game time, if no one dies, wins the game. When the game time reaches 0, a winning scene is displayed showing who had win and with how much territory conquered. Are allowed ties soo no one wins and make the game more challenging and appetizing.

- **Game Views**: 2D Game with top-down perspective
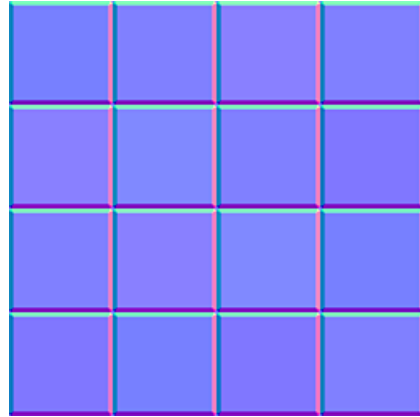
7 Figures

(a) George

(b) George conquering tile

Figure 1: Player George Settings

(a) Werewolf

(b) Werewolf conquering tile

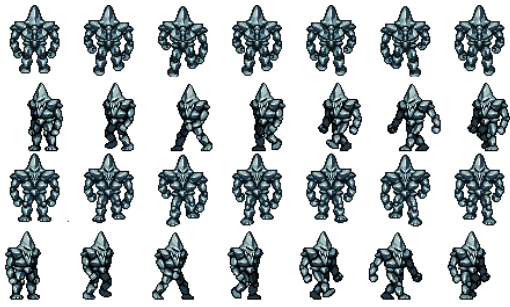Figure 2: Player Werewolf Settings

(a) Baldric

(b) Baldric conquering tile
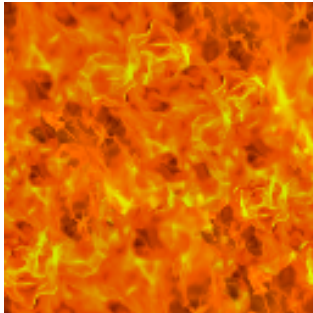
Figure 3: Player Baldric Settings

(a) Golem

(b) Golem conquering tile

Figure 4: Player Golem Settings

(a) Fire Tile

(b) Wall Tile
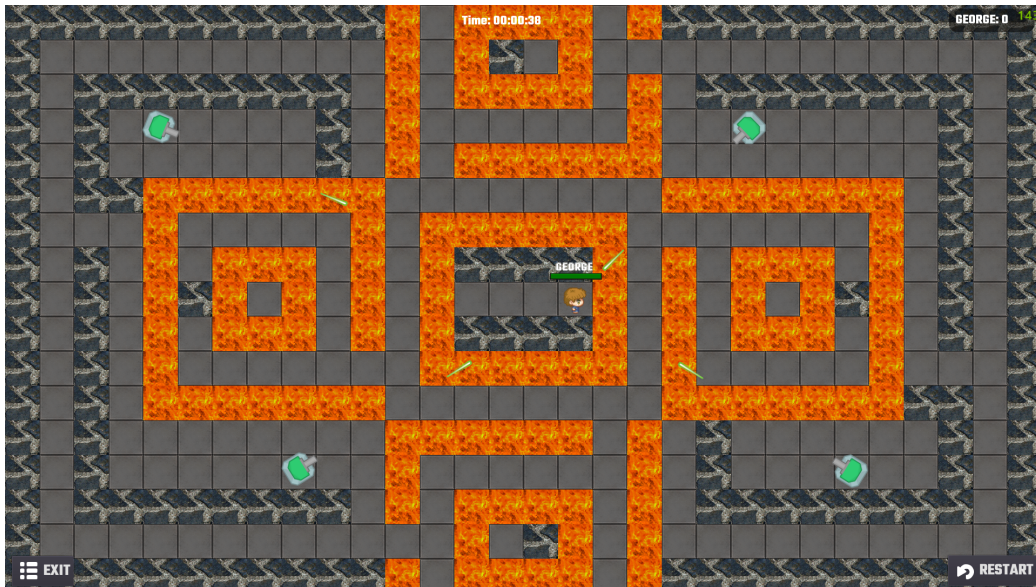

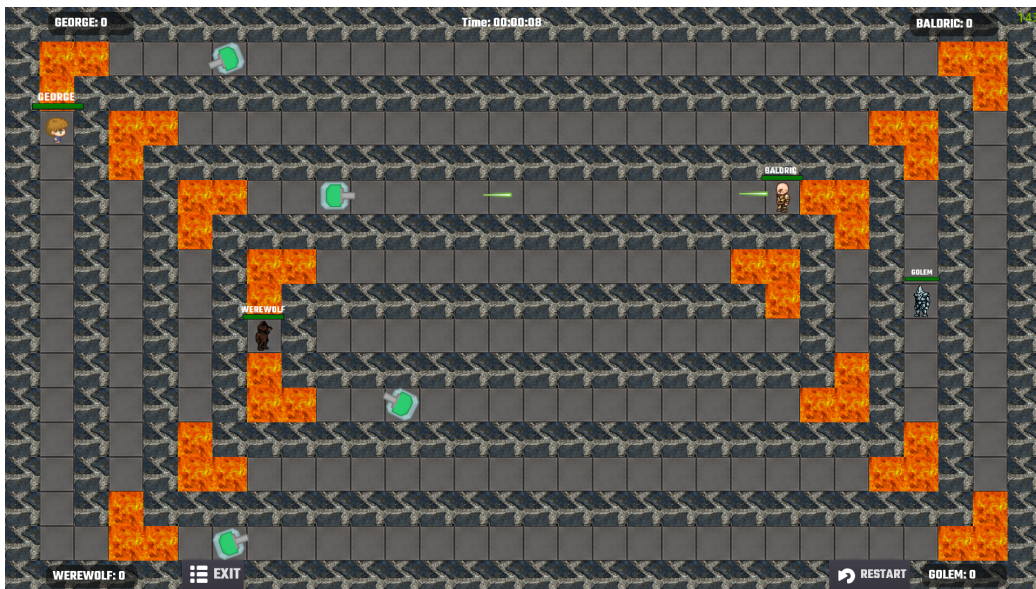(c) Floor Tile

Figure 5: Cavern design tiles

Figure 6: Singleplayer Mode

Figure 7: Multiplayer Mode

Figure 8: Winning Display